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| 10/627,974 | 07/28/2003 | John Schrag | 1500.1084 | 4092 |

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| EXAMINER | |
|---|---|
| AUGUSTINE, NICHOLAS | |
| **ART UNIT** | **PAPER NUMBER** |
| 2179 | |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/627,974 | SCHRAG ET AL. | |
| | Examiner | Art Unit | |
| | NICHOLAS AUGUSTINE | 2179 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *26 May 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

A. This action is in response to the following communications: Amendment filed: 05/26/2009. This action is made **Final**.

B. Claims 1-18 remain pending.

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### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Isensee et al (US 5,734,805), herein referred to as “Isensee” in view of Komerska et al. (“Haptic Task Constraints for 3D Interaction”), herein referred to as “Komerska”.

As for independent claim 1, Isensee teaches a graphical user interface element, comprising: a three-dimensional orientation indicator widget positioned in associated a three-dimensional scene and visually indicating an orientation of the scene (figure 5,6 and 9), and said indicator comprising:
view direction controls each indicating a direction of a corresponding view into the three-dimensional scene (col.4,lines 24-46; col.5, lines 21-30) and causing a display view orientation of the three-dimensional scene to change to the corresponding predefined view orientation when selected (col.5,lines 42-20).
Isensee does not specifically teach that the widget itself or where the view controls rotate corresponding to the change in the display view orientation, however in the same field of endeavor Komerska does teach where the view controls rotate corresponding to the change in the display view orientation (figure 3 and 4; wherein depicted is the actual rotation of the widget). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Komerska into Isensee because Komerska solves the problem of providing a graphical control widget on a display screen to manipulate the screen orientation (figure 3 and 4; section 5.1 “Scene Navigation”).

As for dependent claim 2, Isensee teaches the graphical user interface element as recited in claim 1, wherein an object in the scene is centered and sized to fit the display view when a scene change occurs responsive to selection of one of the controls (col.5,

lines 22-42).

As for dependent claim 3, Isensee teaches the graphical user interface element as recited in claim 1, wherein the indicator is part of the three-dimensional scene, always positioned at a predetermined position in the display view and always substantially a same size in the display view (figure 9).

As for dependent claim 4, Isensee teaches the graphical user interface element as recited in claim1, wherein the element comprises:
a central core control associated with a perspective view of the scene; and axial controls peripherally positioned with respect to the core control, aligned with the axial dimensions of the scene and associated with corresponding front, back, top, bottom, left side and right side views (figures 6 and 7; col.5, lines 42-61).

As for dependent claim 5, Isensee teaches the graphical user interface element is recited in claim 4, wherein the front direction control is different from the other controls (col.5, lines 50-61).

As for dependent claim 6, Isensee teaches the graphical user interface element as recited in claim 4, wherein the axial controls are each shaped to point at the core control indicating the view direction of the axial control. (Figure 6 and 7)

As for dependent claim 7, Isensee teaches the graphical user interface element as recited in claim 4, further comprising a non-axial control peripherally positioned with respect to the core control and indicating a direction of a corresponding view into the three-dimensional scene and causing a display view of three-dimensional scene to change to the corresponding view when selected (col.5, lines 22-61).

As for dependent claim 8, Isensee teaches the graphical user interface element as recited in claim 7, wherein the non-axial controls are specified by a user (figure 6; col.5, lines 22-61).

As for independent claim 9, Isensee teaches a process, comprising:
determining whether a view direction indicating control of a-a three-dimensional orientation indicator positioned in a display view of a three-dimensional scene has been activated; and orienting the display view orientation to the predefined view orientation direction of the control when the control is activated (figures 5-7 and 9; col.5, lines 22-61).
Isensee does not specifically teach that the widget itself or where the view controls rotate corresponding to the change in the display view orientation, however in the same field of endeavor Komerska does teach where the view controls rotate corresponding to the change in the display view orientation (figure 3 and 4; wherein depicted is the actual rotation of the widget). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Komerska into Isensee because Komerska solves

the problem of providing a graphical control widget on a display screen to manipulate the screen orientation (figure 3 and 4; section 5.1 “Scene Navigation”).

As for dependent claim 10, Isensee teaches a process as recited in claim 9, wherein the indicator is in the three dimensional scene and the process further comprises: positioning the indicator in the scene to place the indicator in a predetermined position in the display view; and changing the size of the indicator in the scene to fix the indicator at a predetermined size in the display view (col.5, line 22 - col.6, line 7).

As for dependent claim 11, Isensee teaches a process as recited in claim 9, further comprising: centering a scene object in the display view; and fitting the scene object to the display view (col.5, line 22 - col.6, line 7).

As for independent claim 12, Isensee teaches a system, comprising:

display; an input device used to make selections on the display; and a computer coupled to the mouse and the display, displaying a three-dimensional scene on the display in a display view (figure 9), the scene comprising a three-dimensional orientation indicator positioned in and indicating the orientation of the scene (figure 6), the orientation indicator comprising view controls indicating a view direction and the computer changing the display view orientation to the predefined view orientation direction associated with a control selected by the mouse (col.5,line 22 - col.6,line 7).

Isensee does not specifically teach that the widget itself or where the view controls rotate corresponding to the change in the display view orientation, however in the same field of endeavor Komerska does teach where the view controls rotate corresponding to the change in the display view orientation (figure 3 and 4; wherein depicted is the actual rotation of the widget). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Komerska into Isensee because Komerska solves the problem of providing a graphical control widget on a display screen to manipulate the screen orientation (figure 3 and 4; section 5.1 “Scene Navigation”).

As for independent claim 13, Isensee teaches a computer readable storage controlling a computer by a process stored thereon determining whether a view direction indicating control of three-dimensional orientation indicator positioned in a display view of a three-dimensional scene has been activated (figure 6 and 9) and orienting the display view orientation to the predefined view orientation direction of the control when the control is activated (figure 5-7; col.5, line 22 – col.6, line 7).

Isensee does not specifically teach that the widget itself or where the view controls rotate corresponding to the change in the display view orientation, however in the same field of endeavor Komerska does teach where the view controls rotate corresponding to the change in the display view orientation (figure 3 and 4; wherein depicted is the actual rotation of the widget). It would have been obvious to one of ordinary skill in the art at

the time of the invention to combine Komerska into Isensee because Komerska solves the problem of providing a graphical control widget on a display screen to manipulate the screen orientation (figure 3 and 4; section 5.1 “Scene Navigation”).

As for independent claim 14, Isensee teaches a graphical user interface having three-dimensional directional indicators positioned in and indicating an orientation of a three-dimensional scene and that orient the view to the predefined orientation direction indicated when activated by a user (col. 5,line 22 - col.6, line 7).

Isensee does not specifically teach that the widget itself or where the view controls rotate corresponding to the change in the display view orientation, however in the same field of endeavor Komerska does teach where the view controls rotate corresponding to the change in the display view orientation (figure 3 and 4; wherein depicted is the actual rotation of the widget). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Komerska into Isensee because Komerska solves the problem of providing a graphical control widget on a display screen to manipulate the screen orientation (figure 3 and 4; section 5.1 “Scene Navigation”).

As for dependent claim 15 and 16, Komerska teaches a graphical user interface element and corresponding system, comprising: a display; said display displaying a three-dimensional-n orientation indicator positioned in a three-

dimensional scene (figure 9), visually indicating an orientation of the scene, part of the three-dimensional scene, always positioned at a predetermined position in the display view and always substantially a same size in the display view, and said indicator (figure 5-6) comprising:

view direction controls each indicating a direction of a corresponding view into the three-dimensional scene and causing a display view orientation of three-dimensional scene to change to the corresponding predefined view orientation when selected and where the view controls rotate corresponding to the change in the display view orientation, the view direction controls (col.4, lines 25-58) comprising: a central core control associated with a perspective view of the scene and causing a display view of three-dimensional scene to change to the corresponding perspective view when selected (col.5,lines 50-61); axial controls peripherally positioned with respect to the core control, aligned with the axial dimensions of the scene, associated with corresponding front, back, top, bottom, left side and right side views, shaped to point at the core control indicating the view direction of the axial control with the front view direction control being a different color than the other controls and the axial controls being labeled with axial labels comprising part of the controls; (col.6,lines 1-7) and

a non-axial control peripherally positioned with respect to the core control by a user and indicating a direction of a corresponding view into the three- dimensional scene and causing a display view of three-dimensional scene to change to the corresponding non-axial view when selected, and wherein an object in the scene is centered and sized to fit

the display view when a scene change occurs responsive to selection of one of the controls (col.5, line 22 – col.6, line 7).

Isensee does not specifically teach that the widget itself or where the view controls rotate corresponding to the change in the display view orientation, however in the same field of endeavor Komerska does teach where the view controls rotate corresponding to the change in the display view orientation (figure 3 and 4; wherein depicted is the actual rotation of the widget). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Komerska into Isensee because Komerska solves the problem of providing a graphical control widget on a display screen to manipulate the screen orientation (figure 3 and 4; section 5.1 “Scene Navigation”).

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**4. Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Isensee as modified by Komerska as applied to claims 1-16 above, and further in view of Kopelman, Avi et al (US PAT. 6,664,986).**

To further prosecution in attempt to show the Applicant of another reference that shows an obvious variant, thus Kopelman is introduced as an obvious variant into the system of Isensee as modified by Komerska.

As for claim 17, Isensee teaches the graphical user interface element as recited in claim 1, wherein the three-dimensional orientation indicator visually indicates orientation of an x, y and z axis in relation to the scene (figure 5; col. 5, line 62- col.6, line 7). Isensee

does not specifically in extreme great detail show three-dimensional orientation indicator visually indicates orientation of an x, y and z axis in relation to the scene; however in the same field of endeavor Kopelman teaches three-dimensional orientation indicator visually indicates orientation of an x, y and z axis in relation to the scene (figure 3; col.4, lines 9-44). It would have been obvious to one of ordinary skill in the art at the time of the invention this is true because Kopelman solves the problem of navigation a three-dimensional scene (col.2, lines 41-46).

As for claim 18, Isensee teaches the graphical user interface element as recited in claim 1, wherein the three-dimensional orientation indicator visually indicates top, bottom, left, right, front, and back in relation to the scene (figure 5; col. 5, line 62- col.6, line 7). Isensee does not specifically in extreme great detail show the three-dimensional orientation indicator visually indicates top, bottom, left, right, front, and back in relation to the scene; however in the same field of endeavor Kopelman teaches the three-dimensional orientation indicator visually indicates top, bottom, left, right, front, and back in relation to the scene (figure 2 and 4; col.4, lines 9-44 and 62-67). It would have been obvious to one of ordinary skill in the art at the time of the invention this is true because Kopelman solves the problem of navigation a three-dimensional scene (col.2, lines 41-46).

**re Heck, 699 F.2d 1331, 1332-33, 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting In re Lemelson, 397 F.2d 1006,1009, 158 USPQ 275, 277 (CCPA 1968)).**

### *Response to Arguments*

Applicant's arguments filed 05/26/2009 have been fully considered but they are not persuasive.

After careful review of the amended claims (given the broadest reasonable interpretation) and the remarks provided by the Applicant along with the cited reference(s) the Examiner does not agree with the Applicant for at least the reasons provided below:

A1. As for claims 1, 12-16; Applicant argues that Isensee and Komerska does not teach a three-dimensional orientation indicator positioned in and indicating the orientation of the scene... the view controls rotate corresponding to the change in the display view orientation.

R1. Examiner does not agree, Isensee clearly defines a three-dimensional orientation indicator in figure 5 wherein the user can click on various places on this three-dimensional (visually 3D as well as corresponds to a 3D space) in order to change the scene's orientation view of the users viewer window; wherein the user can select a specific spot on the indicator to change to the top view or bottom view and further with other views as detailed throughout Isensee (col. 5, line 62- col.6, line 7).Komerska is then introduced to cure the deficiencies of Isensee wherein the three-dimensional indicator actually rotates with user selection of changing the scene orientation; this feature (rotating control with user input) is clearly visually displayed in figures 3 and 4 of Komerska which depict the control is different rotated axial spaces.

### *Conclusion*

**The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. (US PAT. 7,347,690;Jordan, Russell A. et al).**

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### *Inquires*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas Augustine whose telephone number is 571-270-1056 and fax is 571-270-2056. The examiner can normally be reached on Monday - Friday: 9:30am- 5:00pm Eastern.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on 571-272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nicholas Augustine/
Examiner
Art Unit 2179
August 12, 2009

/Ba Huynh/
Primary Examiner, Art Unit 2179